

Appl. No. 10/655,258
Amendment dated August 2, 2005
Response to Office Action of May 2, 2005

Amendments to the Drawings:

None.

Appl. No. 10/655,258
Amendment dated August 2, 2005
Response to Office Action of May 2, 2005

Remarks

This application has been carefully reviewed in light of the Office Action of May 2, 2005. Claims 8-10 and 12-22 stand withdrawn. Claims 2 and 4 have been canceled, and claims 1, 3, 6, and 11 have been amended. Claims 1-22 are currently pending. The proposed Amendment After Final is believed to place the application in condition for allowance or at least in better form for appeal without presenting new issues requiring substantial further consideration. Applicant requests further review and reconsideration in light of the following remarks.

Applicant appreciates the courtesies extended by the Examiner in a telephone interview with attorney Jonathan Hines on July 28, 2005. During that interview, Claims 1-4 were discussed with respect to the rejections over Beaver and Huang. Agreement was not reached as to the claims.

Claims 1 and 11 have been rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 5,827,235 (Beaver), and claims 1-3 and 6 have been rejected under 35 U.S.C. 102(a) as being anticipated by U.S. Published Application 2002/0184819A1 (Huang). These rejections are respectfully traversed in light of the present amendment.

Claim 1 has been rewritten to include the features of original claims 2 and 4, and to add additional limitations to distinguish over the prior art. In particular, claim 1 now recites that the control valve includes a shaft with upper and lower ends, where the shaft passes through the injector housing. It also recites that the control valve is moveable between open and closed positions.

It is noted that claim 4 originally recited that "said control valve and said shaft" cooperatively define means for retaining the control valve in a selected flow position. This minor error has been corrected and the claim now recites that the housing and the shaft cooperatively define means for retaining said control valve in a selected flow position. This is consistent with the description of the retention means in the specification and the remainder of the claims (for example, claim 5).

Appl. No. 10/655,258
Amendment dated August 2, 2005
Response to Office Action of May 2, 2005

The Examiner has indicated that claim 4 would be allowable. Claim 4 originally depended from claim 3. As discussed during the above-noted interview, Applicant believes that the limitations of claim 3, which recite that the housing has a separate cap and body, are not required to define over the cited prior art, or to provide antecedent basis for claim 4. Accordingly, it is submitted that the prior art fails to disclose or suggest every element of amended claim 1 and the rejection should be withdrawn.

Claims 3 and 5-7 depend from claim 1 and are thus believed to be allowable for the reasons stated above.

Claim 11 depends from claim 1 and is also believed to be allowable for the reasons stated above. Furthermore, as noted in the previous response, it is believed that the reservoir valve 46 of Beaver, which is vacuum relief device, does not teach an overpressure plug. The Examiner has responded that the functional language in claim 11 is "a statement of intended use" which does not define an apparatus over the prior art. To clarify this distinction, applicant has rewritten claim 11 to recite that the overpressure plug is adapted to be forced out of said relief vent when the pressure of said fluid within said housing exceeds a predetermined level".

The term "adapted to be" has been added to make it clear that the ejection of the plug at a certain pressure is not merely a desired result. Rather, the structural characteristics of the overpressure plug (e.g. its shape and dimensions) are chosen such that it will "pop out" of the housing above the selected pressure, as explained in paragraph [0042] of the specification.

Applicant appreciates the indication that claims 4, 5, and 7 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. However, in light of the above arguments that amended claim 1 is allowable, the rewriting of claims 4, 5, and 7 is not believed to be necessary.


Previously non-elected and withdrawn claims 8, 9, and 10, and pending claim 11

Appl. No. 10/655,258
Amendment dated August 2, 2005
Response to Office Action of May 2, 2005

recite different species of an over-pressure relief mechanism. Specifically, claim 8 relates to the selective fitting of upper and lower control valve seals, claim 9 relates to a generic pressure relief means, claim 10 relates to a relief valve, and claim 11 recites an overpressure plug, as noted above. All of these claims depend from and further limit claim 1. In light of the above arguments that claim 1 is allowable, it is respectfully requested that claims 8-10 should be considered along with claims 1-7 and 11, and that they are allowable without requiring substantial further consideration.

In view of the above, it is submitted that the claims are in condition for allowance. Reconsideration of the objections and rejections is requested. Allowance of claims 1, 3, and 5-11 at an early date is solicited.

Respectfully submitted,


Jonathan M. Hines
Registration No. 44,764

Jonathan M. Hines
ADAMS EVANS P.A.
2180 Two Wachovia Center
Charlotte, North Carolina 28282
Tel. 704-375-9249
Fax: 704-375-0729
e-mail: jmh@adamspat.com
File: 3108/2